

## PATENT COOPERATION TREATY

## PCT



## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 26 MAR 2004

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Applicant's or agent's file reference	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/DK 03/00407	International filing date (day/month/year) 19.06.2003	Priority date (day/month/year) 21.06.2002
International Patent Classification (IPC) or both national classification and IPC D21J1/04, D21J1/04		
Applicant METANITE AS et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand  15.01.2004	Date of completion of this report  25.03.2004	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Telephone No. +49 89 2399- 	

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/DK 03/00407**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-15 as originally filed

**Claims, Numbers**

1-44 as originally filed

**Drawings, Sheets**

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-44
	No: Claims	
Inventive step (IS)	Yes: Claims	1-44
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-44
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: GB-A-1 405 587

D2: WO-A-9419539

2. The closest prior art to the subject-matter of present claim 1 is known from document D1. This document discloses (cf. in particular page 5, line 114-page 6, line 20; page 6, lines 55-109; figures):

"An installation for manufacturing of shaped elements from fibrous waste material, said installation comprising means for mixing a portion of fibrous waste material with at least water, at least one conveyor belt for transporting said mass of waste material and water, a first press for pressing and draining the mass for an amount of surplus water, and means for cutting said pressed mass into elements of predetermined lengths."

The subject-matter of present claim 1 differs from this disclosure in that a second press adapted to co-operate with said conveyor belt for simultaneously pressing and vibrating the mass is provided.

Thereby, the dewatering process of the mass can be improved.

Document D1 merely defines the features mentioned above.

Document D2 (cf. in particular page 11, lines 10-34; page 14, line 32-page 17, line 6; figures) defines a similar installation, wherein the mass of waste material and water is also treated on a first press for pressing and draining the mass.

Thereafter, the mass is transferred from the conveyor to be cut and dried and to be treated in two further press stations. However, no vibrating action is disclosed.

Therefore, no indications for the subject-matter of present claim 1 can be found in documents D1 and D2.

The subject-matter of claim 1 is therefore considered as being novel and involving

an inventive step with respect to the cited prior art (Article 33(2) and (3) PCT).

The industrial applicability of the installation according to claims 1 is obvious (Article 33(4) PCT).

3. Claims 2-19 define additional features of the invention according to claim 1 and as such also meet the requirements of the PCT with respect to novelty, inventive step and industrial applicability with respect to the cited prior art.
4. Present claim 20 defines an apparatus for pressing a mass of fibrous waste material.

The closest prior art to this subject-matter is also known from document D1 (cf. in particular page 5, line 130-page 6, line 12), disclosing an upper and lower opposing surface, at least a part of one of the surfaces being perforated, so as to drain the mass when the mass is pressed between the surfaces.

The subject-matter of present claim 20 differs from this disclosure in that at least one of the surfaces is adapted to vibrate in relation to the mass.

Document D1 mentions passing the layer of slurry carried by a vibrating conveyor through a dewatering device formed between top and bottom belts, like it is shown in figure 3 or 4 of document D1. However, it is not disclosed suggested that one of these belts is formed by the vibrating conveyor itself.

The subject-matter of claim 20 is therefore also considered as being novel and involving an inventive step with respect to the cited prior art (Article 33(2) and (3) PCT).

The industrial applicability of the apparatus according to claims 20 is obvious (Article 33(4) PCT).

5. Claims 21-24 define additional features of the invention according to claim 1 and as such also meet the requirements of the PCT with respect to novelty, inventive step and industrial applicability with respect to the cited prior art.
6. Present claim 25 defines a method corresponding to the use of the installation claimed in present claim 1.

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For the reasons given above, the subject-matter of this claim is therefore also considered as being novel and involving an inventive step with respect to the cited prior art (Article 33(2) and (3) PCT).

The industrial applicability of the method according to claims 20 is obvious (Article 33(4) PCT).

7. Claims 26-44 define additional features of the method according to claim 25 and as such also meet the requirements of the PCT with respect to novelty, inventive step and industrial applicability with respect to the cited prior art.
8. The following points are also to be mentioned:
  - a. Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from document D1 being placed in the preamble (6.3(b)(i) PCT) and with the remaining features being included in the characterizing part (6.3(b)(ii) PCT).
  - b. The features of the claims should have been provided with reference signs placed in parentheses to increase the intelligibility of the claims (Rule 6.2(b) PCT).
  - c. Certain published documents (Rule 70.10)

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO-A-02096536	05.12.2002	31.05.2002	31.05.2001

This document is considered highly relevant with respect to the question of novelty of the subject-matter of present claims 20-24.